CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE

FA1-00611-1 University of California, Davis - CIRM Institute

Requested Funding: $26,059,275

Facilities Working Group Score: 84 **FWG Recommended Funding: $21,889,791**

Possible points ⇨	Value 25	Leverage 25	Urgency 20	Shared Res 15	Functionality 15
FWG Score: 84	20	20	19	12	13

PROPOSAL:

This application proposes renovations to a single-story, high-bay warehouse located on a medical center campus to convert a portion of the space for stem cell research. About 17,200 gross square feet (gsf) of the 109,000 gsf warehouse space has already been renovated and is occupied. That space houses a Clinical and Translational Science Center that is part of a national consortium that facilitates new ways to enhance clinical and translational research. This project would convert an additional 54,200 gsf of what is essentially shell space to house highly developed laboratory space and related support space. The remaining 37,600 gsf will be built out in a future phase of development and is intended to include additional laboratory space and a major lecture space to serve the campus.

The CIRM Institute will provide 38,947 assignable square feet (asf) to co-locate the institution's key stem cell researchers (currently housed in several locations) and to provide new core facilities in support of stem cell research. The goal of the project is to "effectively connect the basic and translational studies with clinical trials, and provide an intellectual home for stem cell research." The application indicates that the total project cost is $61,770,588 and requests CIRM funding of $26,059,275. At occupancy, the facility will house 14 Principal Investigators (PIs), many of whom focus on disease-specific research, along with a core laboratory. Also included is flexible space intended to support an additional 17 PIs who are primarily based elsewhere on the campus, but would be located in the facility on a part-time basis. The key core space included in the CIRM project includes a stem cell bank, a six-station GMP facility, a specific pathogen-free barrier vivarium, and a cell sorter core laboratory. Completion of the project is scheduled for July 2010.

COST:

Cost Summary Table

Cost Category	Application Amount	Revised Amount (prorate building-wide upgrades)	Revised Amount/PI
Building	$56,136,898	$48,737,684	$3,481,263
Group 2 Equipment	5,633,690	5,633,690	402,406
Total	61,770,588	54,371,374	3,883,670
CIRM Amount	26,059,275	26,059,275	1,861,377
Applicant Amount	35,711,313	28,312,099	2,022,293

* Based on number of PIs included in the Part 1 Capacity/Use table

SUMMARY OF FACILITIES WORKING GROUP REVIEW AND DISCUSSION

Value--The reviewer indicated that the proposal was very solid, and although it is one of the higher cost facilities (per PI), this is easily explained by the high cost spaces included in the project, such as the GMP facility and the vivarium. It was noted that given that the overall cost per square foot is below the average, the project is a good value.

The reviewers addressed to what extent infrastructure costs should be allocated to the CIRM project and reduced by 50 percent the cost of building-wide structural upgrading and utilities services included in the application. (The Cost Summary table above includes this adjustment of approximately $7 million.)

The reviewer also stated that the opportunity to connect the facility to an existing central plant is both positive with respect to sustainability, and allowed the applicant to free up some assignable square footage in the main building by building a new stand-alone utility service building. The FWG considered whether or not to include the value of the central plant investment serving this building (i.e., the value of the installed boilers, chillers, etc that provide service to the building) as part of the project leverage, but decided not to include this for any applicant. The infrastructure costs included in this application are for connections only.

Leverage—The reviewer indicated that the leverage was slightly above average for applicants in this category.

Urgency—It was noted that the implementation team had a considerable amount of experience. Also utility work is underway and the building shell is available, so there was high confidence that the applicant could meet the planned schedule

Shared Resources—The reviewer noted that a number of shared resource program opportunities exist with access to other facilities on site. The applicant indicated that the proposed facility will house a very specialized immune-deficient mouse core where testing would be conducted specifically on human stem cells, including newly derived embryonic stem cells, using techniques that are verified by the FDA and leading to clinical trials. Also, the applicant noted that 126 faculty are engaged in stem cell research at this campus with a collaboration with the Buck Institute. It was also noted by the applicant that this campus has the only Primate Research Center in the state and this core facility represents an important collaboration for the stem cell program at the campus

Functionality—The laboratory planner explained that he gave the application a score of C+ for functionality, because the project provides relatively little lab space. He recognized, however, that the building had a lot of very expensive space in it compared to a typical laboratory building. He noted that while some of the space included in the project is costly, the space is needed for the research, so there is value for building it, even if it is very expensive space. He also noted that the amount of bench space being provided per PI was somewhat lower than other proposals. Some members of the FWG disagreed with the laboratory planner's opinion, with one reviewer stating that he thought the facility was very functional and flexible in its design. Another reviewer noted that the capability to build-out an additional 37,000 square feet in this building is an important element as an opportunity to grow the program at a later time. The applicant further stated that while the amount of planned Interactive space in the project is modest, the existing adjacent space is generous in interactive space.

The FWG score for this application was 84. During programmatic review, the FWG voted to recommend funding of $21,889,791, representing 84 percent of the requested amount of $26,059,275.